

Amendments to the Claims:

1. (original): A method of reducing human perceptibility of visible artifacts attributable to embedding a digital watermark in a media signal, said method comprising:

determining a contrast measurement for at least some local areas of the media signal;

adjusting a contrast measurement for a local area if the contrast measurement is above a predetermined level; and

embedding the digital watermark in the at least some local areas in a manner determined at least in part by their respective contrast measurement.
2. (original): The method claim 1, wherein the predetermined level is determined with respect to an average contrast measurement for at least a portion of the media signal.
3. (original): The method of claim 1, wherein said determining step comprises filtering.
4. (original): The method of claim 3, wherein the filtering comprises non-linear filtering.
5. (currently amended): The method of claim 1, wherein the media signal comprises at least one of an image or video.

6. (original): The method of claim 5, wherein the contrast measurement helps to identify areas within the image having relatively noisy contrast.

7. (original): The method of claim 6, wherein watermark embedding strength is increased for relatively noisy contrast areas.

8. (original): The method of claim 1, wherein the predetermined level comprises an expected peak contrast level for the media signal.

9. (original): The method of claim 1, wherein the contrast measurement comprises at least a measure of luminance contrast.

10. (original): The method of claim 1, wherein the adjusting comprises at least one of reducing the measurement and penalizing the measurement.

11. (original): The method of claim 1, wherein said embedding the digital watermark in the local areas in a manner determined at least in part by their respective contrast measurement comprises varying watermark embedding strength as determined by contrast measurement.

12. (currently amended): A method of reducing the human perceptibility of visible artifacts attributable to embedding a digital watermark in a media signal, said method comprising:

determining a contrast measurement for local areas of the media signal;

adjusting a contrast measurement for a local area if the contrast measurement is above a predetermined level;

analyzing the media signal to compute a measure of directional edges in the signal; and

embedding the digital watermark in the local areas as determined at least in part by their respective contrast measurement and measure of directional edges.

13. (original): The method of claim 12, further comprising computing control data based at least in part on the measure of directional edges.

14. (original): The method of claim 13, wherein the control data is used to selectively suppress a digital watermark signal around the directional edges in a manner that controls human perceptibility of the digital watermark signal embedded within the media signal.

15. (original): The method of claim 12, wherein the adjusting comprises at least one of reducing and penalizing.

16. (currently amended): ~~Apparatus~~ An apparatus comprising:
electronic processing circuitry;
memory in communication with the electronic processing circuitry, said memory including executable instructions stored thereon, said instructions to be ~~being~~ executed by said electronic processing circuitry, said instructions comprising instructions to:
analyze a media signal to: i) determine a measure of directional edges at samples in the media signal; ii) measure local contrast at samples in the media signal; iii) map local contrast to a measure of sensitivity;
use data representing the measure of directional edges and the measure of sensitivity to compute control data; and
adjust steganographic embedding of the media signal according to the control data in a manner that minimizes perceptibility of the embedding.

17. (currently amended): ~~The apparatus~~ Apparatus according to claim 16, wherein at least the data representing the measure of the directional edges is used to selectively suppress signal strength of the steganographic embedding around directional edges.

18. (currently amended): ~~The apparatus~~ Apparatus according to claim 16, wherein the steganographic embedding comprises digital watermarking.

19. (currently amended): The apparatus ~~Apparatus~~ according to claim 16, where said executable instructions to analyze a media signal further comprise instructions to: adjust a measure of local contrast if the measure is above a predetermined level.

20. (currently amended): The apparatus ~~Apparatus~~ according to claim 19, wherein the adjusting comprises at least one of reducing or penalizing.

21. (new): A method comprising:
receiving a media signal;
determining characteristics of the media signal;
based at least in part on characteristics of the media signal, determining a characteristic map for the media signal; and
hiding plural-bit data in the media signal in accordance with the characteristic map,
wherein the hiding of the plural-bit data across the media signal is non-uniform in accordance with the characteristic map.

22. (new): The method of claim 21, wherein the characteristics comprise at least a contrast measurement and a directional edge measurement.

23. (new): The method of claim 21, wherein the characteristic map identifies areas within media signal comprising relatively noisy contrast.

24. (new): The method of claim 23, wherein hiding strength is increased for relatively noisy contrast areas.

25. (new): The method of claim 21, the characteristic map identifies areas within media signal comprising an expected peak contrast level for the media signal.

26. (new): The method of claim 21, wherein the characteristic map identifies areas within the media signal in terms of luminance contrast.

27. (new): The method of claim 21, wherein at least one characteristic represents a measure of directional edges, and wherein the characteristic map identifies directional edges that should be suppressed when the hiding the plural-bit data.